the opportunity to	have you t from th	r design disch e Iowa Depa	narges pre extment of	e-approv Natura	ed for any 1 Resources	proje s. Ir	of your project, we are offering ect that requires a Flood Plain accorporating the proper designon.
Please complete the	applicable	attached form	ns and sub	mit to th	e following	g addre	ess:
-		Flood Plain Iowa Dept Wallace St 502 East 9 <sup>th</sup> Des Moine	of Natura ate Office th Street	al Resou Buildin	rces		
It is our intention to	respond to	a request for	pre-appro	val of de	esign hydrol	logy w	within 2 to 3 weeks of receipt.
			Pro	ject No.	(if applicab	ole):	
D	NT					_	
Requestor:	Name:				_		
	Address:						
C:4 C	toto 7:m.						
City, S	tate, Zip:						
	Phone: Fax:						
	Email:						
_	Lillall.						
Stream:							
Drainage Area:		0		N	D		
Legal Description:		Section	T	_ N	R	_ (	ounty:
				R	iver Mile (if	f appl	icable):
		g sources or nather the following)		ere use	d in the dete	termin	nation of the design discharges?
NFIP Flo	ood Insura	nce Study					
USGS R	egional Re	egression Equa	ations from	n USGS	Water Reso	ources	Investigation Report 00-4233
	•	-			Water Reso	ources	Investigation Report 87-4132
•		nalysis (WRC 1, TR-55, Corp			r Dagulatad	Flow	ata)
Other (1)	Explain (	-	s study, r	Kesei voi	Regulateu	TIOW	, etc.)
	Zapiani						
Attached are several	workshee	ets related to th	ne method	s listed	above Plea	ase co	mplete the worksheets related to
	ed. Please						ons (e.g. computer models, etc.)
Estimated 1	Design Di	scharges (as ca	alculated o	on attach	ed workshee	et):	Q50 (cfs):
	Č	<i>-</i> `					Q100 (cfs):

**Hydrology Pre-Approval Request** 

Date: \_\_\_\_\_

Using Flood Insurance Study (FIS)							
FIS is for which community (name):							
*Drainage Area of stream as referenced in FIS:							
Hydrologic Region (as per USGS Report 00-4233):							
Drainage Area Ratio( DA at Project Site DA from FIS ):							
From FIS:  Q50 (cfs): Q100(cfs):							
**Adjusted for Drainage Area (if applicable):  Q50 (cfs): Q100(cfs):							
Applicable Calculations and Description of Method Used:							

<sup>\*</sup> If the drainage area of the stream at the project site is significantly different from the drainage area at the point referenced in the FIS, the design discharge estimates should be weighted as described on page 36 of USGS Report 00-4233.

<sup>\*\*</sup> To use this method, the drainage area at the project site should fall between 50% and 150% of the drainage area from the FIS.

Using USGS Regional Regression Equations (USGS Report 00-4233)								
Hydrologic Region (as per USGS Report 00-4233)	):							
*Mean Channel Slope (MCS) in ft/mi:	(Needed if 3 variable equations are used)							
Des Moines Lobe Ratio (DML) if applicable: **Mixed Region Ratios (if applicable):								
Design Flood Discharges:  Q50 (cfs):  Q100(cfs):								
Applicable Calculations and Description of Metho	d Used:							

<sup>\*</sup> See Appendix B in USGS Report 00-4233 for MCS at specific gage sites and USGS Report 03-4120 for MCS for streams with drainage area over 100 sq. miles.

<sup>\*\*</sup> See page 32 of USGS Report 00-4233 for instructions on calculating flows where the watershed is located in more than 1 hydrologic region.

## Using USGS Regional Regression Equations from USGS Report 87-4132 (NOTE: The use of this method will be considered for drainage areas < 50 sq. miles until such time as the USGS publishes its report of Regional Regression Equations for streams with small drainage areas) Hydrologic Region (as per USGS Report 87-4132): \*Mixed Region Ratios (if applicable): Design Flood Discharges: Q50 (cfs): Q100(cfs): Applicable Calculations and Description of Method Used:

<sup>\*</sup> See page 32 of USGS Report 00-4233 for instructions on calculating flows where the watershed is located in more than 1 hydrologic region.

Using WRC Bulletin 17B (Log-Pearson III Analysis) (Table 2 in USGS Report 00-4233 includes the recently published WRC Bulletin 17B estimates for gages on most Iowa streams.)
Stream Gage Referenced (name and number):
Location of Stream Gage (Sec/T/R, or River Mile):
*Drainage Area of Stream at Gage:
**Years of Record at Gage:
Drainage Area Ratio( DA at Project Site DA at Gage Location ):
Hydrologic Region (as per USGS Report 00-4233):
From WRC 17B Analysis: Q50 (cfs): Q100(cfs):
***Adjusted for Drainage Area (if applicable): Q50 (cfs): Q100(cfs):
Applicable Calculations and Description of Method Used:

<sup>\*</sup> If the drainage area of the stream at the project site is significantly different from that at the referenced stream gage station, the design discharge estimates should be weighted as described on page 36 of USGS Report 00-4233.

<sup>\*\*</sup> If there are less than 20 years of record at the gage site, WRC Bulletin 17B methods may not be appropriate for estimating flow frequencies without weighting with regional regression estimates as described on page 35 of USGS Report 00-4233.

<sup>\*\*\*</sup> To use this method, the drainage area at the ungaged project site should fall between 50% and 150% of the drainage area at the gage.

## **Other Methods or Sources Used** Method or Source Used: Reason for Using This Method: Design Flood Discharges: Applicable Calculations and Description of Method or Source Used: